AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all prior versions, and listings, of claims.

LISTING OF CLAIMS

1- 43. (Cancelled).

44. (New) A method for *in vitro* fertilization comprising the step of: exposing and culturing *in vitro* one or more oocytes with spermatozoa in a culture medium containing an additive or additives capable of endogenous stimulation of the accumulation of at least one MAS; characterized in that the oocytes are in metaphase II (MII) and the exposure and culturing lasting until zygotes are formed and wherein the MII oocytes are cumulus enclosed oocytes.

45. (New) The method according to claim 44, wherein 1-15 oocytes are cultured and exposed together.

46. (New) The method according to claim 44, wherein the additive or additives leads to a ratio of at least 2 between the relative content of MAS in cumulus enclosed oocytes cultured in the presence of the additive or additives, the relative content of MAS in cultured cumulus enclosed oocytes being determined by stimulating female mice with exogenous gonadotropins 48h prior to removal of the ovaries from the mice and recovering cumulus enclosed oocytes from the ovaries by puncturing individual follicles and culturing the recovered cumulus enclosed oocytes in an α-minimum essential medium supplemented with 3mg/l bovine serum albumin, 5 mg/l human serum albumin, 2mM L-glutamin, 100IU/ml penicillin, 100µg/ml steptomycin, 4mM hypoxanthine and ^{3}H-mevalonat for 24h at 37°C, 100% humidity and 5% CO_2 in air, followed acidification with 50µl 0.3M Na_2PO_4 pH=1, organic extraction three times with a five-fold surplus of n-heptane:isopropanol (3:1 v/v), purification of MAS from the organic phase by high pressure liquid chromatography and determination of the ratio of radioactivity per cumulus enclosed oocyte between cumulus enclosed oocytes cultured in the presence of the additive or additives and cumulus enclosed oocytes cultured

without the presence of the additive or additives.

47. (New) The method according to claim 44, wherein the additive is selected from the group consisting of gonadotropins such as FSH (i.e., proteins with follicle-stimulating activity comprising the amino acid sequences of the heterodimers of the FSH and the chains of pitnitary derived proteins and substances activating the FSH-receptor of the ovarian cumulus cells) and analogues, growth factor such as EGF (i.e., proteins which activate the EGF receptor and causes accumulation in the cumulus-oocyte complex) and analogues, compounds inhibiting sterol Δ14-reductase such as AY9944-A-7, compounds inhibiting 4-demethylase converting T-MAS to Zymosterol, compounds activating cytochrome P450 lanosterol 14α -demethylase and compounds with an amphotericin like effect.

48. (New) The method according to claim 47, wherein the additive is a combination of a gonadotropin and a growth factor.

49. (New) The method according to claim 48, wherein the additive is a combination of EGF and FSH.

50. (New) The method according to claim 47, wherein the additive is EGF.

51. (New) The method according to claim 47, wherein the additive is FSH.

52. (New) The method according to claim 49, wherein FSH is an FSH isoform with an isoelectric point above 5.0.

53. (New) The method according to claim 51, wherein FSH is an FSH isoform with an isoelectric point above 5.0.

54. (New) The method according to claim 49, wherein the FSH is derived from naturally occurring FSH such as FSH extracted from urine, or from recombinant FSH.

55. (New) The method according to claim 49, wherein the concentration of FSH is between 2 and 200IU FSH/l.

56. (New) The method according to claim 50, wherein the concentration of EGF is between 1 and 10ng EGF/ml.

57. (New) The method according to claim 46, wherein the additive is amphotericin.

58. (New) The method according to claim 47, wherein the additive is amphotericin.

59. (New) The method according to claim 44, wherein the *in vitro* fertilisation is *in vitro* fertilisation of human oocytes.